

**Amendments to the Claims:**

The listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

Claims 1-111 (canceled).

Claim 112 (previously presented): A method of inducing an immune response to at least one antigen comprising  
applying a formulation to hydrated skin of an organism,  
wherein the formulation comprises  
(i) at least one antigen which is derived from a pathogen and  
(ii) at least one adjuvant,  
wherein an effective amount of the at least one antigen induces the immune response to the at least one antigen in the organism.

Claims 113-114 (cancelled).

Claim 115 (previously presented): The method of claim 112, wherein the pathogen is selected from the group consisting of bacterium, virus, fungus and parasite.

Claim 116 (previously presented): The method of claim 112, wherein the antigen is selected from the group consisting of carbohydrate, glycolipid, glycoprotein, lipid, lipoprotein, phospholipid, and polypeptide.

Claim 117 (previously presented): The method of claim 112, wherein the pathogen is a live or an attenuated live virus and the antigen is expressed by the live or attenuated live virus.

Claim 118 (previously presented): The method of claim 115, wherein the bacterium is anthrax.

Claim 119 (previously presented): The method of claim 115, wherein the virus is

rabies.

Claim 120 (previously presented): The method of claim 112, wherein the at least one adjuvant is selected from the group consisting of bacterial DNA, cytokines, chemokines and lipopolysaccharides.

Claim 121 (previously presented): The method of claim 112, wherein the at least one adjuvant is an ADP-ribosylating exotoxin or toxoid thereof having adjuvant activity.

Claim 122 (previously presented): The method of claim 121, wherein the ADP-ribosylating exotoxin or toxoid thereof is selected from the group consisting of pertussis toxin, a pertussis toxin toxoid having adjuvant activity, cholera toxin (CT), a CT toxoid having adjuvant activity, an *E. coli* heat-labile enterotoxin (LT), an LT toxoid having adjuvant activity, diphtheria toxin (DT), a DT toxoid having adjuvant activity, *Pseudomonas* exotoxin A, and a *Pseudomonas* exotoxin A toxoid having adjuvant activity.

Claim 123 (previously presented): The method of claim 112, wherein the at least one adjuvant is an ADP-ribosylating exotoxin B subunit from cholera toxin (CT).

Claim 124 (cancelled)

Claim 125 (previously presented): The method of claim 112, wherein the at least one adjuvant is selected from the group consisting of an ADP-ribosylating exotoxin in which ADP-ribosyl transferase activity is inactivated; an ADP-ribosylating exotoxin chemically conjugated to a carbohydrate, polypeptide, glycolipid, or glycoprotein antigen; an ADP-ribosylating exotoxin subunit chemically conjugated to a carbohydrate, polypeptide, glycolipid, or glycoprotein antigen; and, an ADP-ribosylating toxoid chemically conjugated to a carbohydrate, polypeptide, glycolipid, or glycoprotein antigen.

Claim 126 (previously presented): The method of claim 112, wherein the formulation is a cream or gel or emulsion or ointment or lotion or paste or solution or suspension.

Claims 127 -128 (cancelled)

Claim 129 (previously presented): The method of claim 112, wherein the formulation is applied with a patch.

Claim 130 (previously presented): The method of claim 112, wherein the formulation further comprises a dressing.

Claim 131 (previously presented): The method of claim 130, wherein the dressing is occlusive or non-occlusive.

Claims 132 -133 (cancelled).

Claim 134 (previously presented): The method of claim 120, wherein said cytokine is tumor necrosis factor alpha.

Claims 135-149 (cancelled).